OIPE IAP85
OCT 21 2005
PATENT & TRADEMARK OFFICE

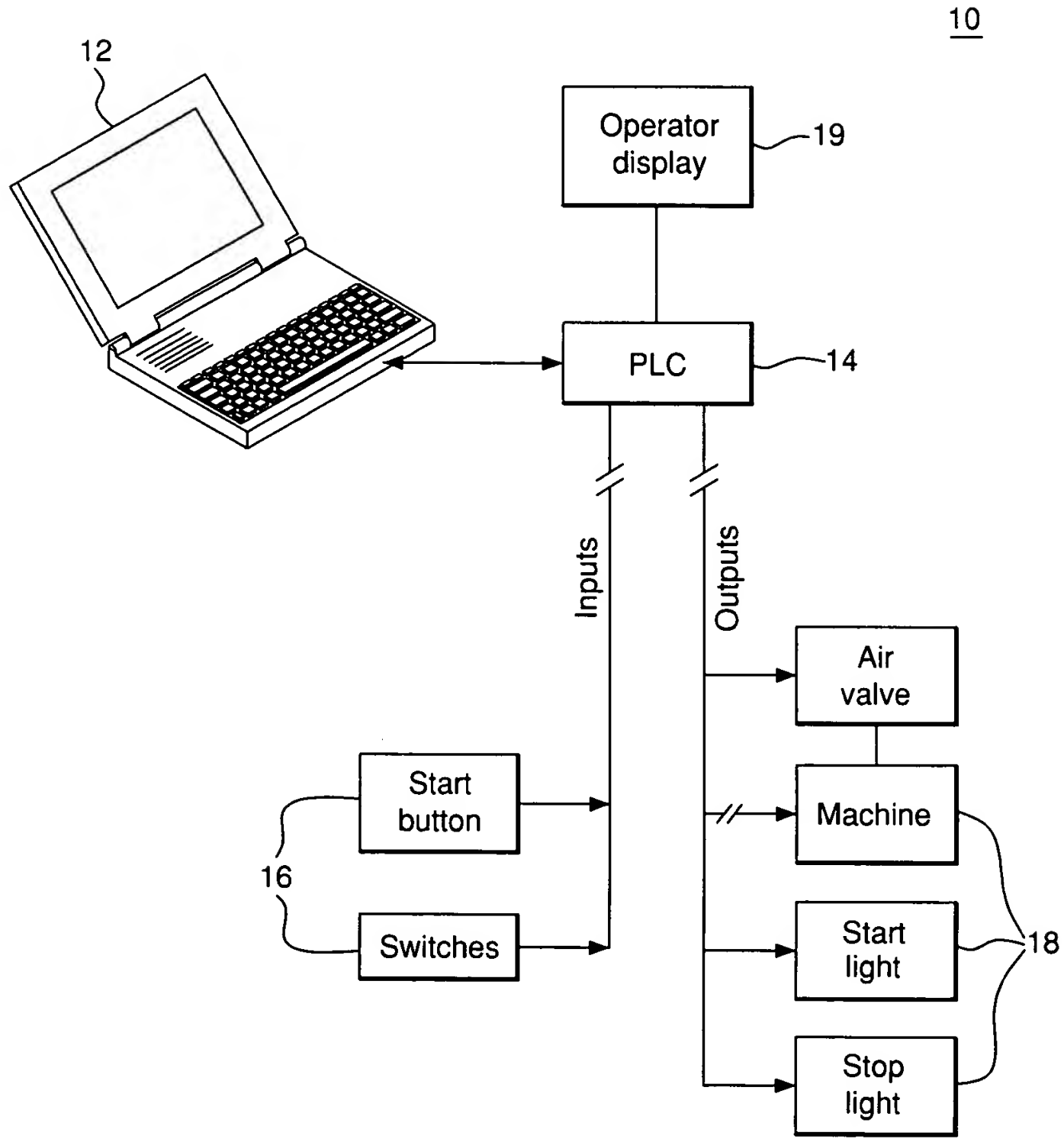

FIG. 1

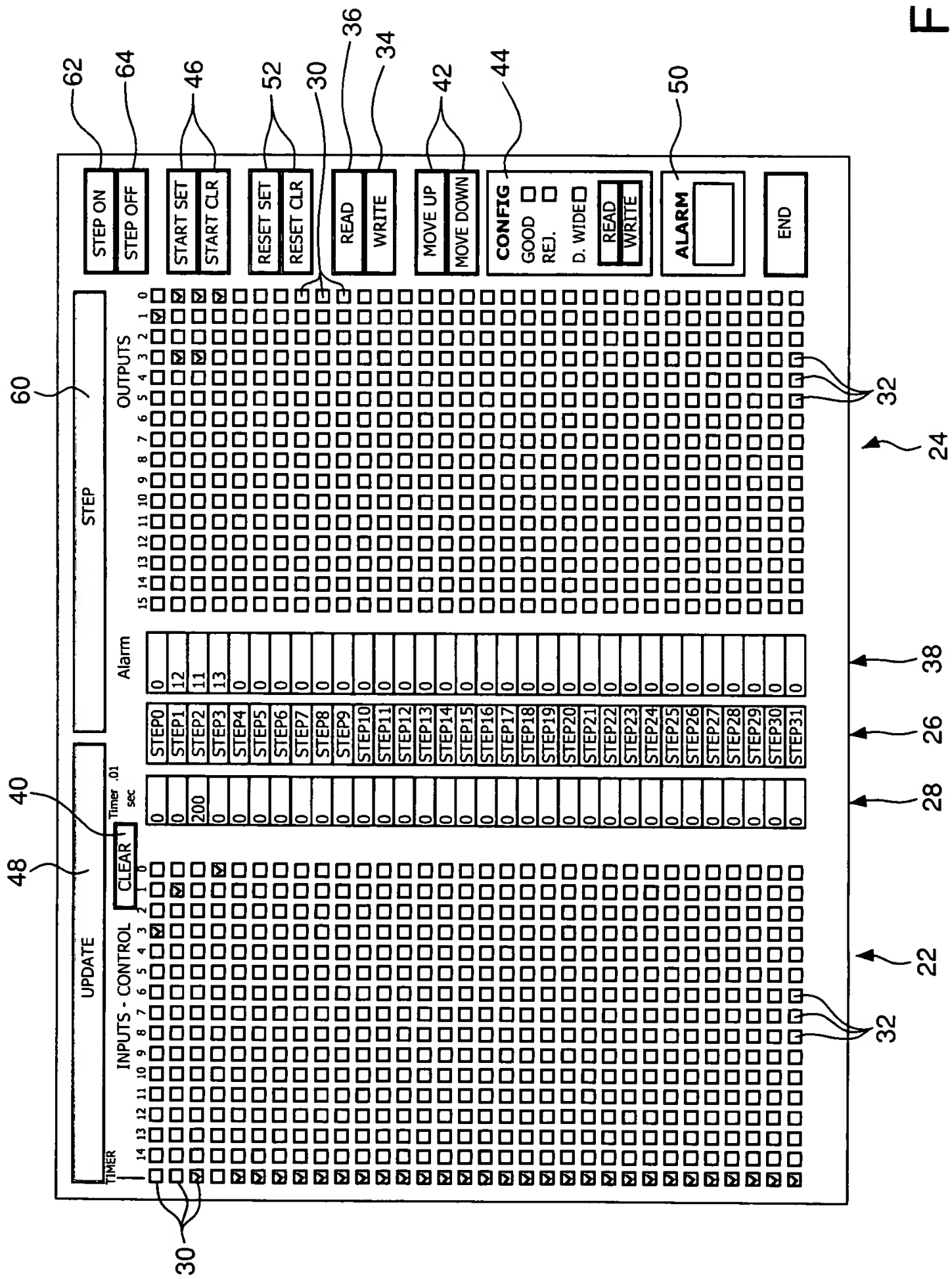
62
64
46
52
30
36
34
42
44
50
STEP ON
STEP OFF
START SET
START CLR
RESET SET
RESET CLR
READ
WRITE
MOVE UP
MOVE DOWN
CONFIG
GOOD
REJ.
D. WIDE
READ
WRITE
ALARM
END
OUTPUTS
60
32
24
STEP
Alarm
38
STEP0 STEP1 STEP2 STEP3 STEP4 STEP5 STEP6 STEP7 STEP8 STEP9 STEP10 STEP11 STEP12 STEP13 STEP14 STEP15 STEP16 STEP17 STEP18 STEP19 STEP20 STEP21 STEP22 STEP23 STEP24 STEP25 STEP26 STEP27 STEP28 STEP29 STEP30 STEP31
26
28
40
Timer .01 sec
CLEAR
48
UPDATE
INPUTS - CONTROL
22
TIMER
30

FIG. 2

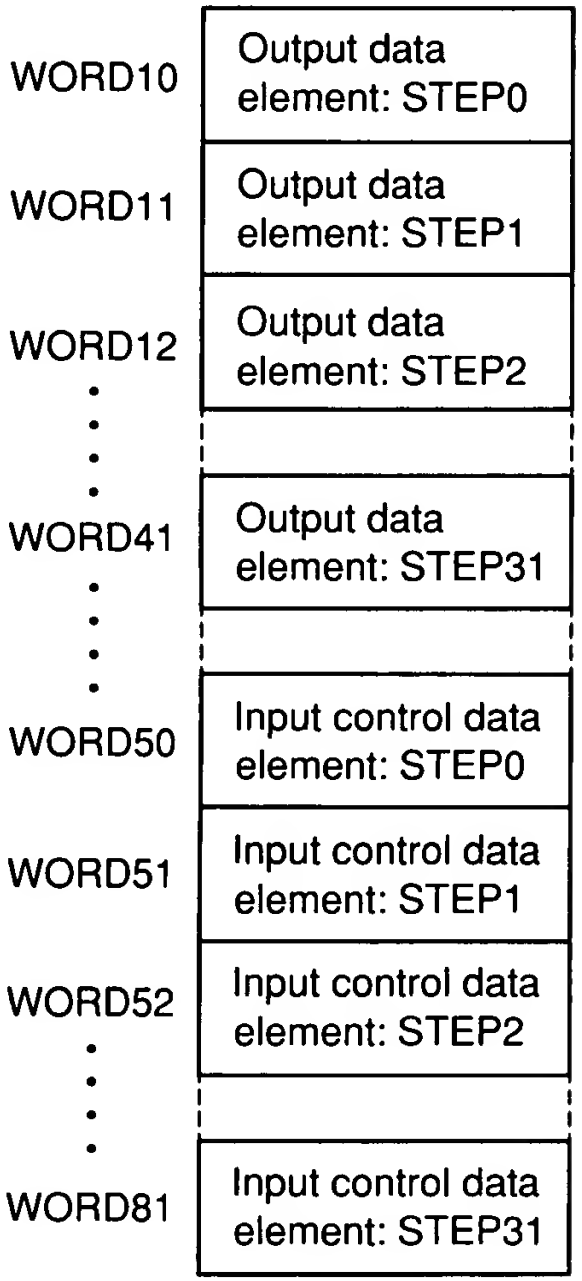

FIG. 3

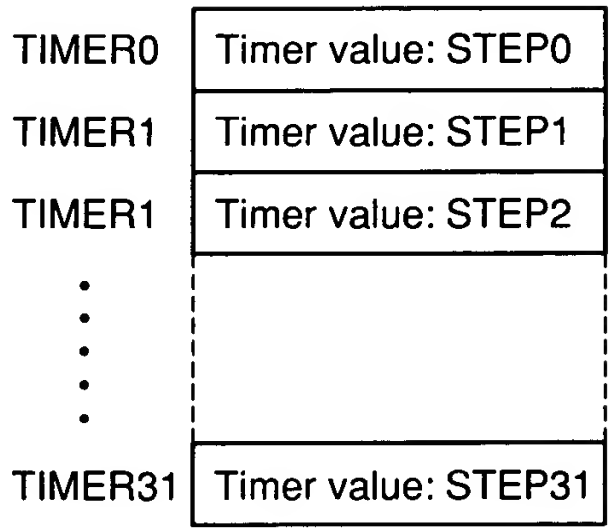

FIG. 4

Patent Application No. 09/772,493
REPLACEMENT SHEET

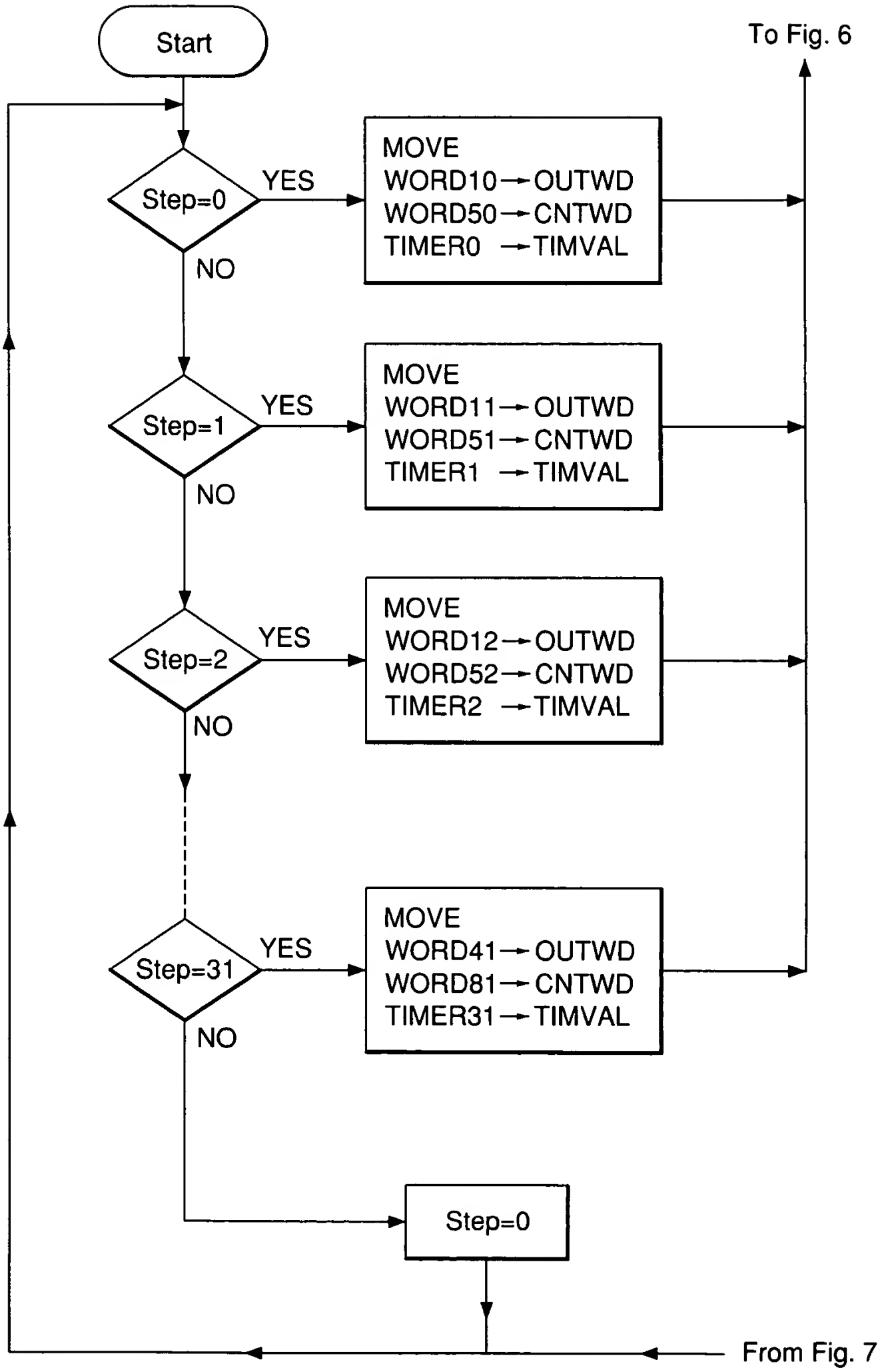
Start
To Fig. 6
Step=0
YES
NO
MOVE
WORD10→OUTWD
WORD50→CNTWD
TIMER0 →TIMVAL
Step=1
YES
NO
MOVE
WORD11→OUTWD
WORD51→CNTWD
TIMER1 →TIMVAL
Step=2
YES
NO
MOVE
WORD12→OUTWD
WORD52→CNTWD
TIMER2 →TIMVAL
Step=31
YES
NO
MOVE
WORD41→OUTWD
WORD81→CNTWD
TIMER31→TIMVAL
Step=0
From Fig. 7

FIG. 5

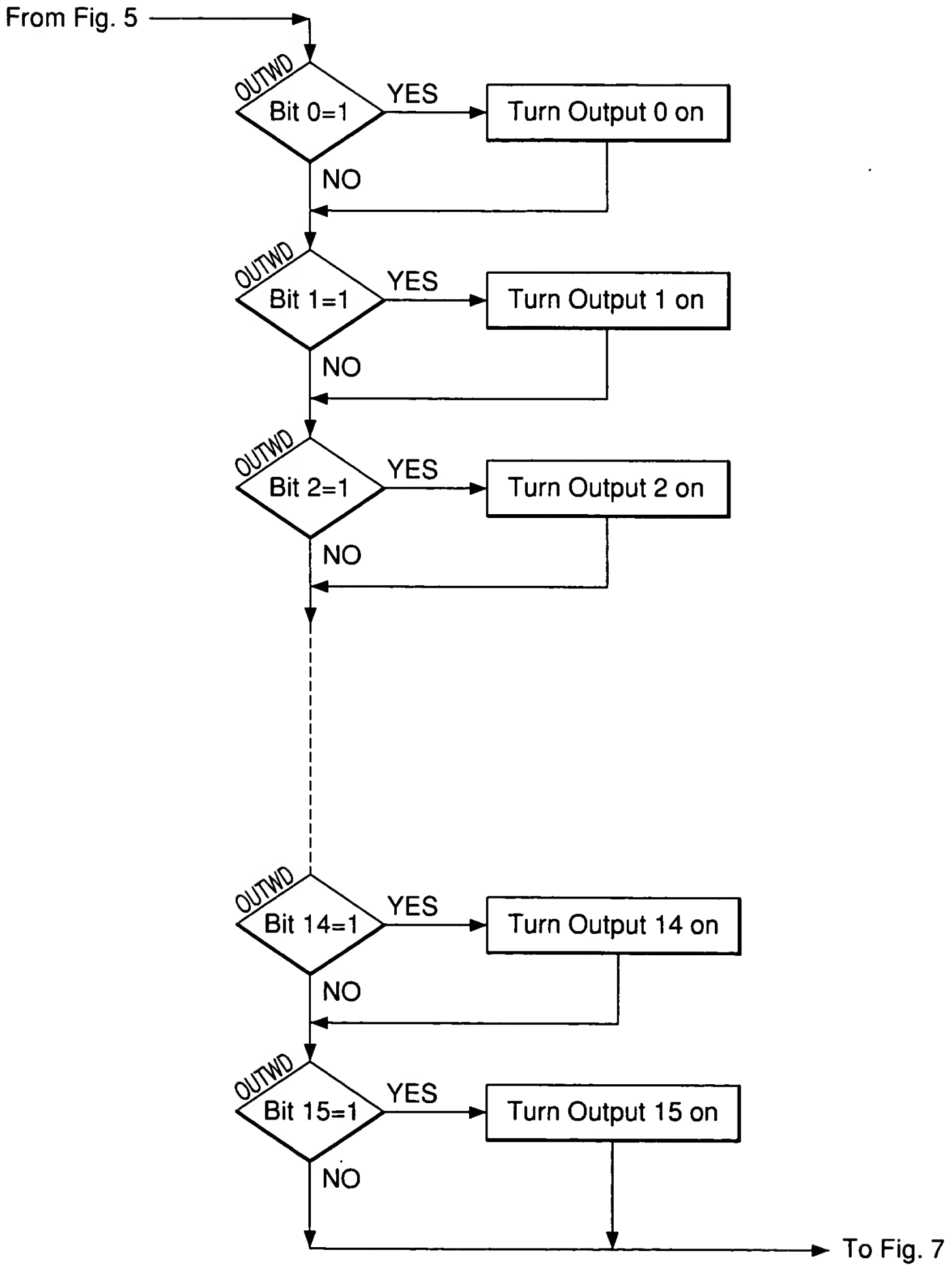
From Fig. 5
OUTWD
Bit 0=1
YES
Turn Output 0 on
NO
OUTWD
Bit 1=1
YES
Turn Output 1 on
NO
OUTWD
Bit 2=1
YES
Turn Output 2 on
NO
OUTWD
Bit 14=1
YES
Turn Output 14 on
NO
OUTWD
Bit 15=1
YES
Turn Output 15 on
NO
To Fig. 7

FIG. 6

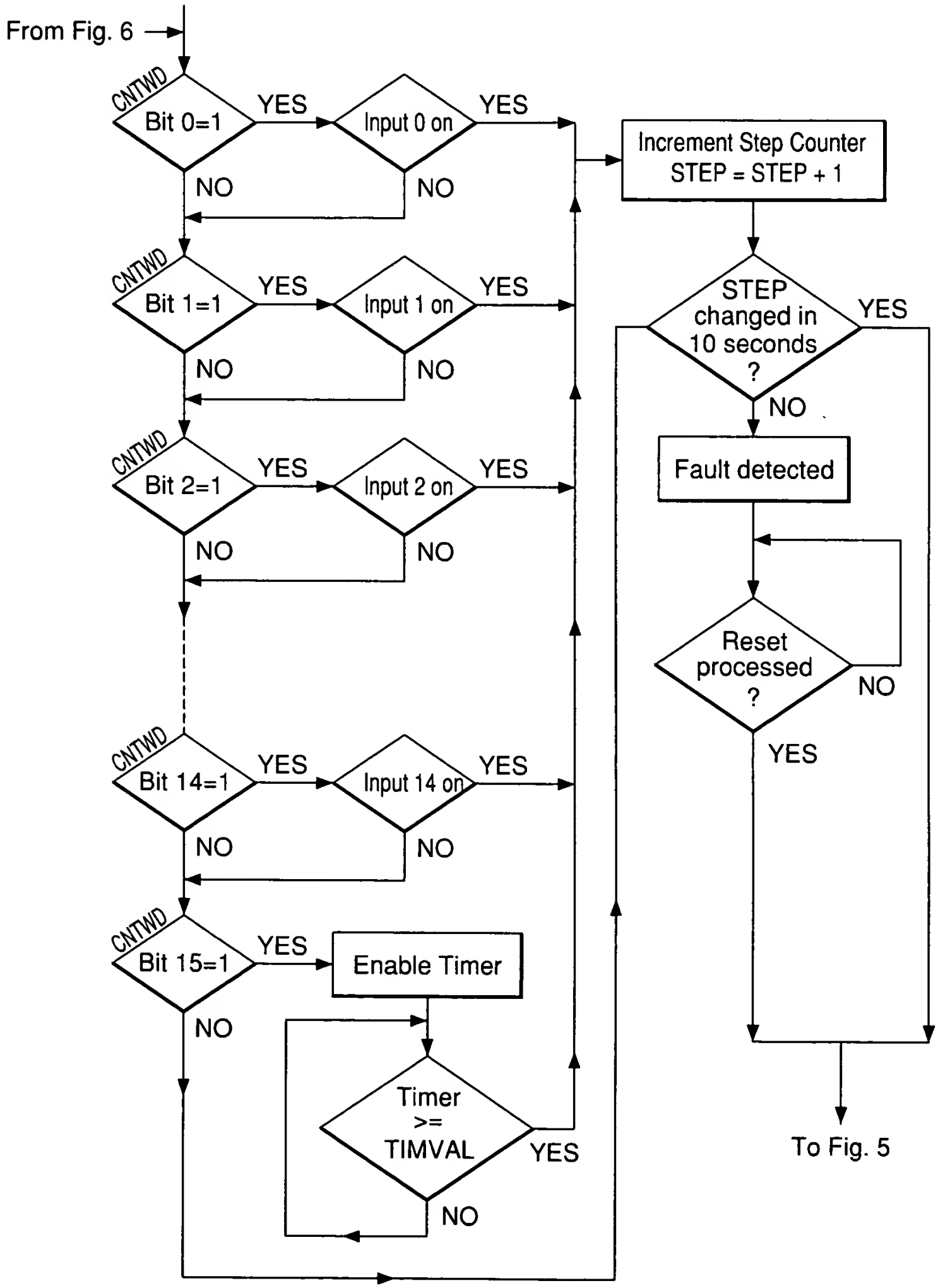
From Fig. 6
CNTWD
Bit 0=1
YES
Input 0 on
YES
NO
NO
CNTWD
Bit 1=1
YES
Input 1 on
YES
NO
NO
CNTWD
Bit 2=1
YES
Input 2 on
YES
NO
NO
CNTWD
Bit 14=1
YES
Input 14 on
YES
NO
NO
CNTWD
Bit 15=1
YES
Enable Timer
NO
Timer
>=
TIMVAL
YES
NO
Increment Step Counter
STEP = STEP + 1
STEP
changed in
10 seconds
?
YES
NO
Fault detected
Reset
processed
?
NO
YES
To Fig. 5

FIG. 7